



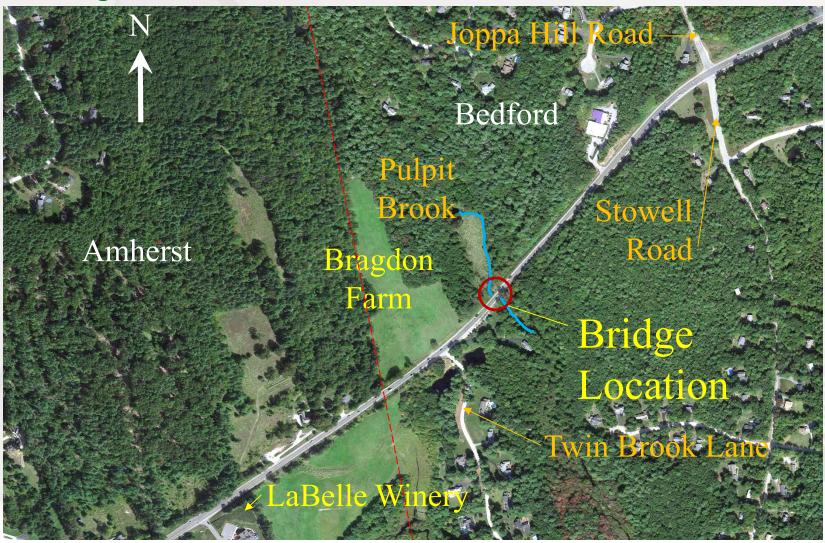


Agenda

- Welcome & Introductions
- Project Location
- Existing Conditions
- Natural & Cultural Resources Update
- Initial Alternatives & Proposed Solution
- Schedule & Construction Cost
- Questions and Comments



Project Location





Site Photos



Looking Southwest on NH 101 (Bridge in Picture)



North Headwall



South Headwall



Exist. Roadway Overview – NH 101

- Constructed in 1951 (68 years old)
- Average Daily Traffic = 20,100 vehicles per day (2019)
- Posted Speed Limit = 50 mph
- Roadway width = 40 feet
 - 12-foot travel lanes
 - 8-foot shoulders
- 100' Right-of-Way width



Existing Bridge

- Twin 5'-0" Concrete Culverts
- Constructed in 1951 with roadway (68 years old)
- #44 on the 2018 New Hampshire DOT Red List
- Northern headwall replaced by Bridge Maintenance in 2011



Existing Bridge Condition











Natural/Cultural Resources Update

- Assessment of Natural and Cultural Resources for NEPA and Section 106 compliance
- Natural Resource Concerns
 - Wetlands / Vernal Pools
 - Stormwater Treatment (MS4 Compliant)
 - NHDES Stream crossing rules
 - Threatened and Endangered Species
 - · Blanding's Turtle
 - Northern Long-eared Bat
 - Conservation lands (Bragdon Farm)
- No impacts to Cultural Resources (archaeological sites or historic structures) identified



Initial Alternatives Analysis

- 1. Rehabilitation or No Build Options (Not Feasible)
 - Hydraulic Deficiencies (Route 101 will overtop in a 50year storm)
- 2. Replacement Options
 - Phased Bridge Construction (requires over-widening)
 - Accelerated Bridge Construction (ABC) with Roadway Closure
 - Conventional Construction with On-Site Traffic Diversion and Temporary Bridge

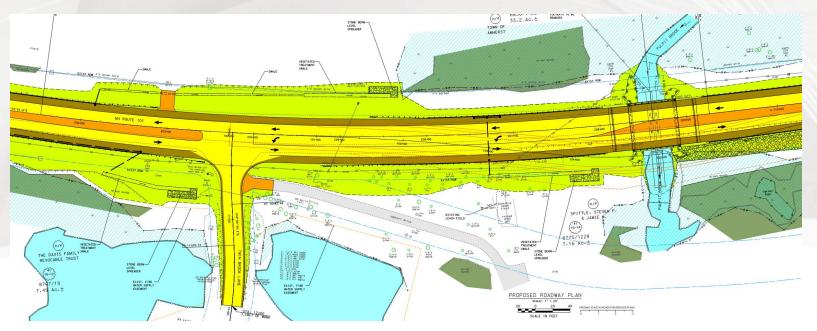
Preferred in February 2018



Proposed Plan - Final

Left Turn Lane Added (for Twin Brook Lane)

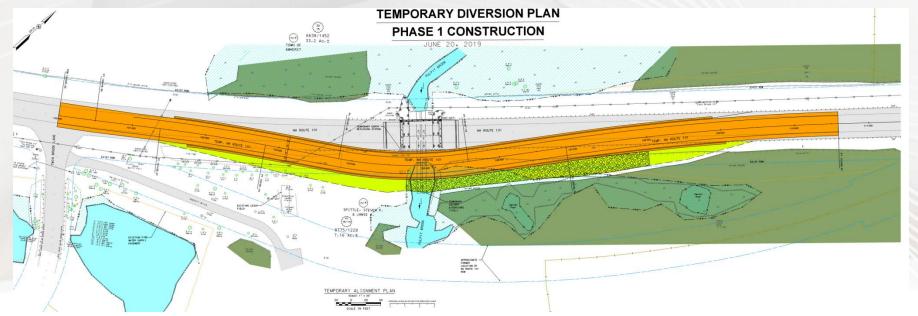






Proposed Plan – Phase 1 Temporary Impacts

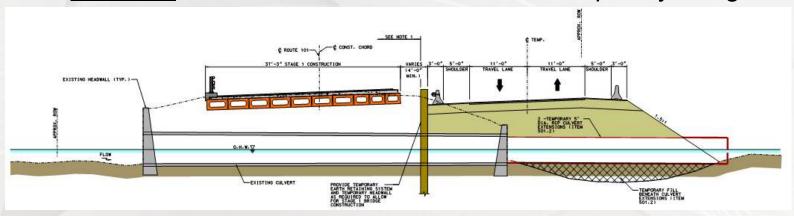
- Temporary on-site diversion
- Possible aerial utility relocations
- Public Hearing Required
 - ROW needed for stormwater treatment



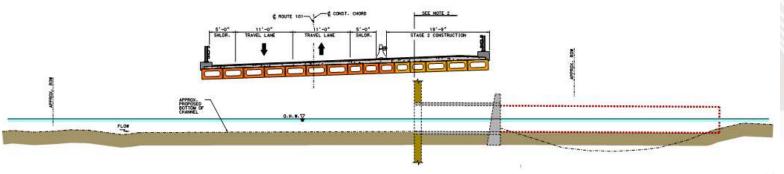


Proposed Traffic Phasing

Revised Phased Construction Approach
Phase 1 - On-Site Traffic Diversion and Temporary Bridge



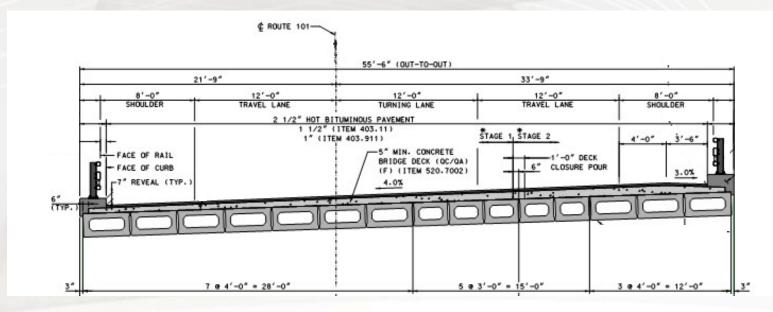
Phase 2 - Traffic shifted to Portion of Newly Constructed





Proposed Bridge Details

- 48-foot clear span
- Butted precast concrete box beams
- Conventional cast-in-place abutments and wingwalls





Project Schedule and Cost

Schedule

- Public Hearing Fall 2019
- Final Design 2020
- Advertising Early Spring 2021
- Construction starting late summer 2021

Construction Cost Estimated at \$3.5 million



Thank You

Presentation Material is Available on the Department's website

www.nh.gov/dot/projects Bedford 13692C

